Economics and Sociology
Occasional Paper No. 1933

INFORMAL FINANCE AND FINANCIAL MARKET INTEGRATION IN EL SALVADOR

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February 1992

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Abstract

Recent empirical evidence from El Salvador indicates that informal finance plays a significant role in the provision of credit services, and is well integrated with the formal financial sector. The effectiveness of monetary policy is not likely to be hindered by informal financial activity.

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I. INTRODUCTION

Informal financial markets have received increasing attention in recent years. In addition to their evident prevalence in Africa, informal financial intermediaries play significant roles in the economies of Latin America and Asia (Adams and Fitchett, Chandavarkar). Researchers and policy makers are concerned with the relative importance of informal finance in overall financial markets, the roles informal intermediation play in developing countries, and the implications of informal financial activity for financial market development, and for the effectiveness of financial and monetary policy. This paper contributes empirical evidence and analytical insights into these concerns from an extensive survey carried out in El Salvador (Cuevas, Graham, and Paxton).

During the 1980s, the Salvadoran economy suffered a decline due to political turmoil, the international recession and misdirected economic policies. The banking system was nationalized in 1980, artificially low interest rates were maintained by government banks through directed credit programs to stimulate investment. These interest rates were outpaced by inflation, resulting in negative real interest rates and a contraction of the volume of loanable resources. Tight monetary programming caused by persistent fiscal deficits and the use of rediscount facilities led to a decline in the volume of real credit granted to the private sector.

Data indicate that due to the repressive regulatory environment, informal financial intermediation expanded during this period to compensate for the deficiencies of the banking system. Evidence of this increase in informal financial activity is exemplified by the fact that growth rates in real GDP have occurred in spite of a contraction in the real volume of formal sector credit to the private sector. This indicates that enterprises obtained resources through self-financing and/or from informal intermediaries rather than borrowing from formal institutions. These indirect signals motivated the comprehensive study of informal financial markets that provides the basic data for this paper.

A brief description of the study methods and data is presented first. A discussion of the roles and significance of informal finance, and their implications for monetary policy follows. Concluding remarks are offered in the last section of the paper.

II. METHODS AND DATA

The findings analyzed here derive from some 2,000 interviews with different participants in informal financial markets throughout the country. Rural and urban households, enterprises, cooperatives, and individual informal financial intermediaries comprise the populations under analysis. In the users/urban household sector, 500 interviews were conducted in the metropolitan area of San Salvador, and in the major cities. Sampling among these populations followed a multi-stage method based on cartographic and census information. A cluster sample technique was used to select 700 rural households. A sample frame available at the Salvadoran Foundation for Economics and Social Development

(FUSADES) served as the basis for selecting 400 enterprises stratified by size in four categories: micro, small, medium, and large.

Informal financial intermediaries are by definition not regulated by the monetary authorities, and not registered with any entity which could provide a sample frame for these intermediaries. Hence, informal intermediaries were interviewed as they were identified by users of financial services, households or enterprises. These informal intermediaries were a priori classified into three categories: (a), enterprises/intermediaries, i.e., non-financial firms providing lending and/or deposit services (250 interviews); (b), informal groups, associations or unions (50 interviews); and (c), individual intermediaries (100 interviews).

The questionnaires used with each market participant documented the composition of their liability and asset portfolio, and the terms and conditions of financial transactions associated with each portfolio component. The identification of contracting partners allowed the assessment of the relative importance and role of informal financial intermediation, as well as the evaluation of the extent of market integration with the formal financial system.

III. THE ROLE OF INFORMAL FINANCE

This analysis of the relative importance of informal finance focuses on two closely related aspects: the <u>social</u> relevance of informal financial services, and the <u>economic</u> significance of informal intermediation. The first issue is discussed in terms of <u>access</u> to financial services by households and enterprises, while the second area of analysis looks into the <u>magnitude</u> of the liquidity flows circulating informally, and the <u>pricing</u> of financial services in the informal financial market.

A. The Social Role of Informal Finance: Access to Financial Services

The informal financial sector is the principal source of credit for all types of users identified in this study. This includes not only rural and urban households and enterprises, but also the informal intermediaries themselves (enterprises, cooperatives and individuals).

The rural sector is where the presence of informal intermediaries acquires the highest significance. While at least 45 percent of the rural households do not have access to any source of loanable funds, informal loans represent 81 percent of the credit transactions effectively performed. Among urban households, of which at least 26 percent do not have access to credit of any sort, informal credit transactions account for 78 percent of total loan transactions. This proportion grows to 81 percent for low-income urban dwellers, while in the upper-middle class urban sector informal loans represent three-fourths of all credit transactions.

Finally, at least 70 percent of the enterprise-users obtain loans from informal sources, notably suppliers. Among these enterprises, the mix of (relatively soft) supplier-credit, and purely informal loans (relatively more expensive) declines as the enterprise size diminishes. In other words, although overall access to informal loans is fairly uniform across enterprise sizes, the proportion of loans associated with well established business relationships (supplier credit) increases as enterprise size increases. While about 56 percent of the microenterprises in our user sample received supplier loans, almost 90 percent of the large enterprises had access to this stable, low-cost form of informal credit.

As for the informal intermediaries interviewed in our survey, access to informal sources of funds clearly outweighs their use of institutional credit. At least 80 percent of the enterprise-intermediaries, and more than likely all of them, had loans from informal sources, again dominated by supplier credit. More than one-half of the loans obtained from cooperatives were supplied by informal sources, while the share of these sources in all loans received by individual financial intermediaries (IFIs) was 81 percent, i.e., comparable to that of rural households indicated above.

Institutional credit is only a relevant source of funds for enterprises - about 45 percent of the enterprises had access to these formal sources. The incidence of institutional credit incidence among households does not exceed 18 percent of the sample. Moreover, formal loans appear concentrated in large, collateral-rich firms, while informal loans are more significant in the portfolio of smaller enterprises and households, underscoring the social relevance of informal intermediation in the provision of credit services. Deposit services, contrary to credit services, are provided primarily by the formal financial system, notably banks.

The preceding remarks summarize the typical asymmetry observed in financial markets in developing countries. Where information is crucial, i.e., in the provision of credit services, informal finance stands out as the sector with clear comparative advantage, while formal institutions minimize transaction costs through focusing on large, secured loans to enterprises.

B. The Economic Role of Informal Finance: Debt and Asset Portfolio of Users, and the Pricing of Financial Services

1. Informal Finance in the Users' Portfolio

Assuming the risks inherent in all extrapolations, Table 1 presents a summary of the liability and asset portfolio of all users of financial services combined. The extrapolation takes into account the different proportions of the total population accounted for by our sample. Sample proportions were estimated on the basis of population statistics for El Salvador, average household sizes of 5.2 and 4.7 inhabitants per household for rural and urban areas, respectively, and the effective number of interviews undertaken in each sector.

The importance of the extrapolation in Table 1 is to put in perspective the real incidence of informal finance in terms of overall monetary balances. <u>The overall incidence of informal credit in the debt portfolio of all users combined reported in Table 1 is indeed about 30 percent</u>. This overall incidence is less than that of institutional credit - 70 percent, or that of banks alone - 54 percent of total user's debt.

On the asset side, informal lending compares well with deposit holdings as primary assets in the overall portfolio of users. Forty-five percent of the estimated total users' financial assets are represented by informal loans to others, while 55 percent of these assets are held in bank deposits.

It must be kept in mind that Table 1 corresponds to a measure of overall monetary circulation, rather than to a "consolidated" balance sheet of all households and enterprises, consolidation our data do not allow. However, with this caveat in mind, it is possible to conclude that the relative <u>economic</u> importance of informal finance, i.e., in terms of monetary balances held by households and enterprises, is substantial. This relative incidence, although less dramatic than that indicated above as social relevance, i.e., in terms of numbers of users, cannot be neglected or overlooked. Almost one-third of the debt, and almost one-half of total financial assets represent a significant incidence of informal finance. For every 100 colones of deposits in the banking system there are 86 colones in informal loans in the economy. For every 100 colones of bank credit outstanding, there are 55 colones of informal debt, of which 51 colones are owed to enterprises.

The extent to which the presence of the informal financial sector represents a major obstacle for policy makers, and a big question mark in policy effectiveness not only depends on the relative magnitude of the liquidity circulating informally, but also on the degree of isolation or fragmentation existing between the informal and the formal system. Informal finance represents a serious policy-making constraint if informal liquidity stays informal and does not "cross the bridge" to the banking system. When there is no transmission of policy impact from the formal sector to the informal sector, a dual structure of financial prices emerges reflecting the fragmentation of the overall financial market, as financial market participants are enclosed in their respective market cells.

In El Salvador, informal finance appears to be well connected with the formal (institutional) financial sector, thus reducing the danger of policy ineffectiveness that could otherwise be associated with a significant presence of informal finance. Two indications of this apparent integration are evident. First, the degree of market integration in the pricing of financial services is apparent and secondly, the interaction, or linkages, between participants in informal markets and formal financial institutions is substantial, as will be documented below.

2. Pricing of Financial Services

The analysis of prices of financial services focuses on the terms and conditions of formal and informal loans. Three characteristics of formal and informal loan contracts are contrasted here to evaluate the degree of market integration: the interest rate charged on loans, the term structure of loans, and the collateral requirements of these loan contracts. The overall ranges (minimum to maximum values) are reported in Figures 1 through 3. Figure 1 displays the ranges of interest rates on formal and informal loans by borrower category, while Figure 2 does the same for the term structure of these loans. Figure 3 compares collateral requirements between formal and informal loans for different borrower categories by looking at the frequencies of the two extreme cases: mortgage collateral required as loan guarantee, and no collateral at all.

The general impression obtained from Figures 1 through 3 is that formal and informal markets appear fairly integrated (i.e., the ranges overlap) in terms of interest rate conditions and term structure, while showing a sharp degree of fragmentation (i.e., segmented ranges) in terms of collateral requirements. Not surprisingly, interest rates on formal loans fluctuate within a range narrower than that displayed by informal loans in Figure 1 due to interest-rate controls in the Salvadoran financial system, while interest rates charged on informal loans fully overlap the range of formal sector rates, and invariably go beyond these to reach substantially high rates (with the sole exception of one borrower group).

Without a measure of the concentration of loan transactions over these ranges of interest rates, conclusions are necessarily limited. The shaded areas in Figure 1 indicate, however, that borrowers from informal sources are exposed to substantially higher costs of credit. The sectors relying more heavily on informal sources, such as rural households, are likely to be forced to borrow informally at these higher rates more often than other sectors where access to institutional credit is less restricted, such as enterprises.

The coincidence of term structures of informal and formal loans is clearly displayed in Figure 2. For all borrowers, there is a broad range of term lengths where formal and informal loans overlap. In this case however, contrary to the pattern observed for interest rates, the term structure of informal loans is consistently shorter than that associated with formal credit, for all borrower categories.

Market fragmentation between formal and informal financial transactions appears strikingly clear when collateral conditions are contrasted in Figure 3. Mortgage collateral is a highly frequent requirement in formal loans, while the proportion of credit contracts with no collateral in this sector is minimal. In contrast, loans with no collateral requirements are predominant in informal credit transactions. This pattern is not unusual in financial markets in developing countries. The informational advantages enjoyed by informal lenders translate into reduced physical collateral requirements, acceptance of a variety of collateral substitutes such as co-signatures or group-guarantees, and a widespread practice of "character" lending.

Overall, formal and informal loan transactions appear to share similar ranges of values for interest rates and term lengths of contracts, both signs of fairly integrated markets. The dichotomy of collateral requirements highlighted above reflects more the differences in information quality and information costs faced by formal lenders as compared to informal sources of credit.

In summary, a potential borrower in the informal market should expect higher interest rate costs, and shorter terms than comparable loans in the formal sector. However, the collateral conditions are likely to be substantially less strict, a feature that represents the difference between access and no-access to credit for large segments of the population.

IV. INFORMAL FINANCE, AND FORMAL FINANCE: IMPLICATIONS FOR MONETARY POLICY

The relationships between informal finance and the formal financial sector in El Salvador are based on two strong inter-sectoral links: first, the role of households holding formal deposits while actively borrowing in the informal sector, and second, the crucial role in informal lending played by enterprises drawing the majority of their funds from the formal sector.

As summarized in Table 1, rural households as well as urban households are net debtors in the informal sector, i.e., their liabilities with informal sources outweigh the value of assets held in informal transactions. On the other hand, rural households and to a greater extent urban households are net creditors in the formal sector. The amounts held in financial assets at formal institutions exceed the outstanding debt balances with these institutions. This is a very significant imbalance which can be better described by taking the overall ratio of bank deposits held by households, over bank loans received by these households. This ratio is computed in Table 2 for the aggregate household sector (line 1), using the figures reported in Table 1. The magnitude of this ratio indicates that for every colón of credit received from banks, households hold 17.38 colones in bank deposits.

Enterprises, both those classified as users as well as those identified as intermediaries, show a net debtor position in the formal sector, and a net creditor position in the informal sector, attained primarily through their significant activity in sales on credit and consignment. These net positions are summarized for the population of enterprise-users by the ratios reported in Table 2, lines 1 and 2.[1] Enterprises hold as bank deposits less than 40 percent of the total amount of their bank debt (line 1). In contrast, they lend informally one-and-a-half times the amount of funds they borrow informally (line 2), a ratio that grows to almost 5 to 1 when the subset of enterprise-intermediaries is considered (see Table 2, footnote).

Most interestingly, turning now to the inter-sectoral linkages between formal and informal finance through households and enterprises, lines 3 and 4 in Table 2 show the ratios of bank deposits held to informal loans received, and of informal credit granted to bank loans received, respectively. While the 14 to 1 ratio observed for households in line 3 confirms their preference for bank instruments in their asset portfolio, the ratio displayed by enterprises (0.69 to 1) indicates their preference for informal lending as primary asset.

The ratio of informal credit granted to bank loans received reaches 2.8 to 1 for enterprise-intermediaries (Table 2, footnote). This is to say, for every 100 colones in outstanding debt with banks, these enterprises hold 280 colones in assets in the informal sector, a proportion about three times higher than that measured for enterprise-users (Table 2, line 4). This contrast in the magnitude of liquidity transfer carried out by enterprises

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[1] The corresponding ratios for enterprise-intermediaries are reported as a footnote to this table, since a weighted average for all enterprises is impossible to calculate not knowing the population size for enterprise-intermediaries.

suggests an indicator by which enterprises could be categorized as users vis à vis intermediaries. A further insight into this distinction is offered below.

* The role of enterprises as financial intermediaries can be set forth even more clearly if one computes the ratio between net informal credit granted (i.e., the amount of informal loans granted minus the amounts borrowed in informal transactions) over the net debtor position with banks (i.e., amounts borrowed from banks less deposits balances held with banks) for both enterprise-users and enterprise-intermediaries. The ratio obtained for enterprise-users is 0.46 to 1, i.e., for every 100 colones in net debt with banks (after deducting their deposit balances), these enterprises have lent a net 46 colones (after subtracting their informal borrowing) in informal transactions primarily with their business clients. The ratio calculated following identical method for enterprise-intermediaries is almost 4 to 1, about 9 times higher than that shown by enterprise-users. Enterprise-intermediaries hold in net informal sector assets four times the value of their net debt with banks, which suggests that these enterprises use large amounts of their own resources for informal lending. In summary, all enterprises (users as well as intermediaries) perform an important financial intermediation role, and are essential in the transmission of liquidity from the institutional sector to the informal sector.

The preceding analysis documented the close relationship between formal and informal finance. The ratios reported in the right hand column, lines 3 and 4 of Table 2 can be interpreted as transmission coefficients between the two sectors. Institutional credit translates into informal loans to households and enterprises primarily through the activity of non-financial enterprises at the rate of 0.82 to 1. Informal loans granted in the economy then "find their way back" into the formal sector through the household preference for bank deposits, further forced by the absence of informal depository opportunities. Liquidity does flow between the formal and informal financial sectors, therefore policies that affect monetary volumes will transmit from one sector to another with relative ease, instead of affecting solely the institutional sector.

The apparent integration of interest rate and term structures in the credit market discussed above suggests that at least a subset of financial market participants operate in both the formal and the informal sector. Hence, transmission of price signals is likely to occur every time financial price policies create arbitrage opportunities and incentives in either sector.

V. CONCLUSIONS

The pattern described above indicates a clear liquidity cycle from the formal sector, primarily through non-financial enterprises acting as primary borrowers from banks, to the informal sector where households as well as smaller firms obtain their liquidity. This pattern of liquidity circulation, along with the significant involvement of all sectors as depositors in the formal sector, and the heavy reliance of enterprises on institutional credit suggest that formal and informal finance in El Salvador are closely interrelated.

Contractions or expansions of domestic credit will have an impact on informal financial flows primarily through their effect on enterprise credit. Likewise, changes in enterprise activity due to real sector shocks will affect enterprise informal financial intermediation, access to these services by households and other enterprises, and consequently create secondary effects in the cycle of monetary circulation. These interrelationships and their significance should be recognized and taken into consideration by policy makers responsible for the effectiveness of monetary and financial policies.

TABLE 1
RELATIVE IMPORTANCE OF INFORMAL FINANCE IN OVERALL MONETARY BALANCES

POPULATION TOTALS	RURAL HOUSEHOLDS	URBAN HOUSEHOLDS	ENTERPRISES - USERS	GRAND TOTAL ₡'000	RELATIVE IMPORTANCE
Sample proportions, % of pop.	0.88	0.17	4.50		%
LIABILITIES, C'000					
INSTITUTIONAL CREDIT	8,761.4	382,625.3	8,072,155.6	8,463,542.2	70.1%
of which, from Banks	4,340.9	220,338.2	6,295,980.0	6,520,659.1	54.0%
INFORMAL CREDIT	16,779.8	262,021.8	3,333,995.6	3,612,797.1	29.9%
of which, from Enterprises*	12,016.5	159,930.6	3,160,755.6	3,332,702.6	27.6%
TOTAL LIABILITIES	25,541.1	644,647.1	11,406,151.1	12,076,339.3	100.0%
Shares by User Group, %	0.1%	3.0%	94.5%	100.0%	
FINANCIAL ASSETS, C'000					
INFORMAL LOANS	3,276.6	178,810.0	5,168,142.2	5,350,228.8	44.9%
of which, to Clients	1,180.3	52,545.3	4,525,637.8	4,579,363.4	38.4%
to Family & Friends	2,057.7	71,205.9	139,900.0	213,163.6	1.8%
DEPOSITS IN INSTITUTIONS	18,520.7	4,096,705.9	2,422,971.1	6,538,197.7	54.9%
of which, in Banks	16,917.8	3,888,213.5	2,286,984.4	6,192,115.8	52.0%
OTHER DEPOSITS (Informal)	269.9	10,540.0	10,771.1	21,581.0	0.2%
TOTAL FINANCIAL ASSETS	22,067.2	4,286,055.9	7,601,884.4	11,910,007.5	100.0%
Shares by User Groups, %	0.1%	23.8%	63.8%	100.0%	

Source: Cuevas, Graham, and Paxton. Extrapolation based on sample totals (Tables 4, 5 and 6) and sample proportions indicated above.
* Includes supplier credit to enterprise-users.

TABLE 2

SELECTED ASSET TO DEBT RATIOS FOR THE USER POPULATION

ASSET TO DEBT RATIO	HOUSEHOLD SECTOR	ENTERPRISES (USERS)[a]	ALL
1. Bank Deposits Held to Bank Loans Received	17.38	0.36	0.95
2. Informal Credit Granted to Informal Loans Received	0.65	1.55	1.48
3. Bank Deposits Held to Informal Loans Received	14.01	0.69	1.71
4. Informal Credit Granted to Bank Loans Received	0.81	0.82	0.82

Source: Table 1.

[a] Ratios for Enterprise-Intermediaries are, from top to bottom, 0.29, 4.91, 0.51, and 2.80.

Figure 1
Formal and Informal Finance: Interest Rate Structure, Overall Ranges of Loan Rates

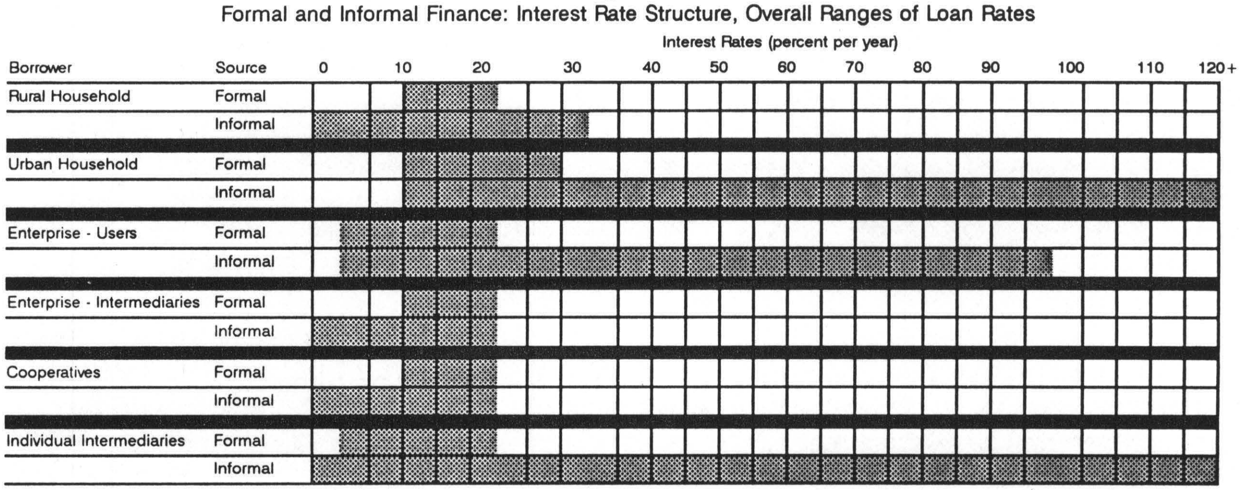


Figure 2
Formal and Informal Finance: Term Structure of Loans, Overall Ranges

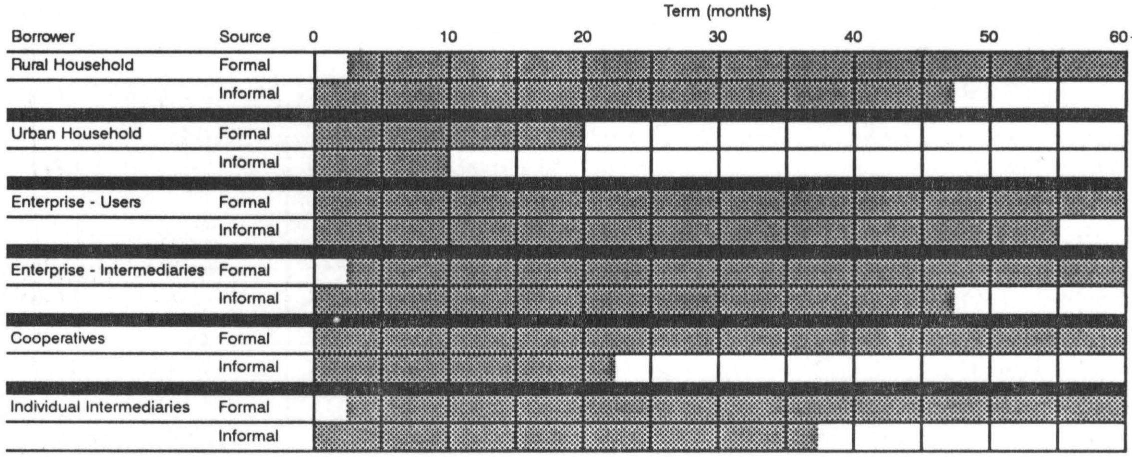
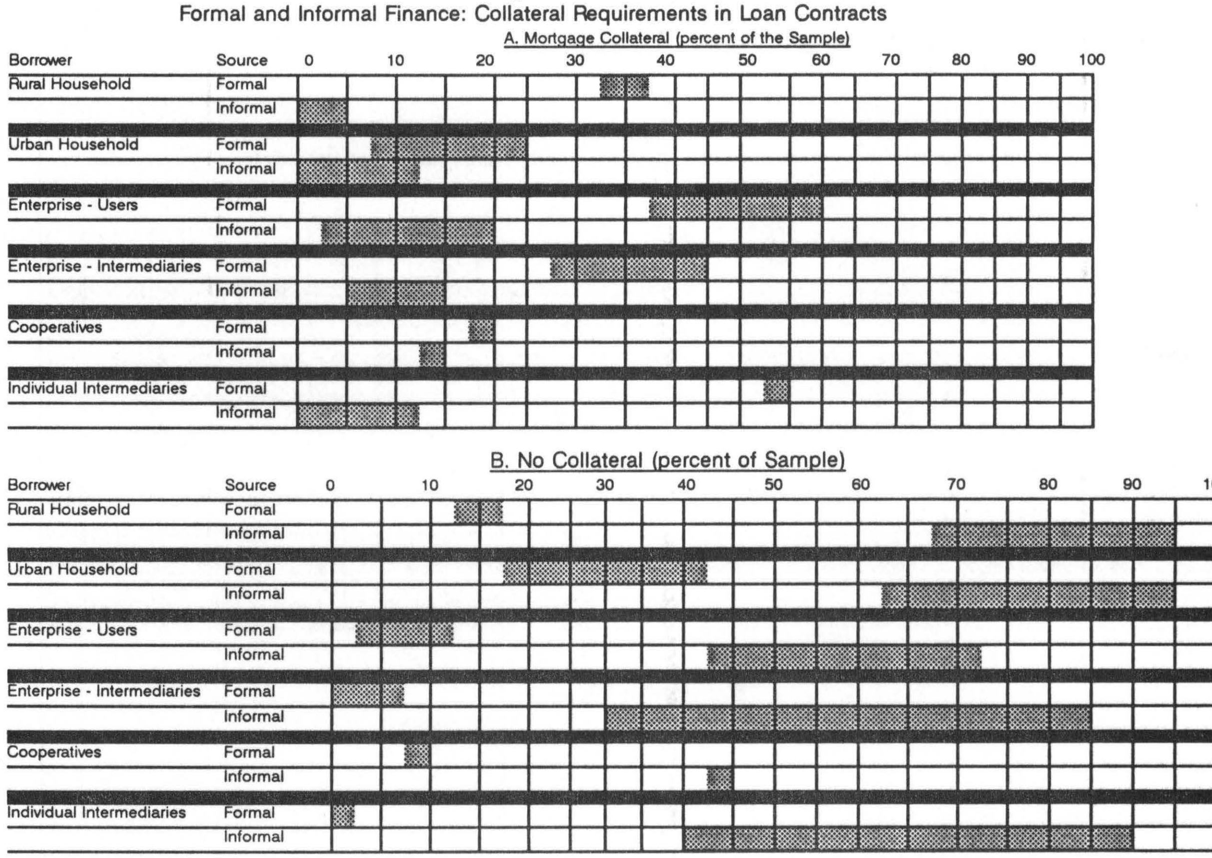


Figure 3
Formal and Informal Finance: Collateral Requirements in Loan Contracts



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